6CE3

Half-Wave Vacuum Rectifier

Duodecar Type
Pressure-Welded Cathode Coating
For Color-TV Damper-Diode Applications

ELECTRICAL CHARACTERISTICS – Bogey Values

Heater Voltage, ac or dc	E_h	6.3	V
Heater Current	I_h	2.5	A
Direct Interelectrode Capacitances:[a]			
Plate to cathode and heater	$c_{p(k+h)}$	13	pF
Cathode to plate and heater	$c_{k(p+h)}$	18	pF
Heater to cathode	c_{h-k}	5.5	pF
Instantaneous Tube Voltage Drop for instantaneous plate current (i_b) = 680 mA	e_b	20	V

MECHANICAL CHARACTERISTICS

Maximum Overall Length	3.375 in (85.72 mm)
Maximum Seated Length	3.000 in (76.2 mm)
Maximum Diameter	1.188 in (30.1 mm)
Envelope	JEDEC T9
Base[b]	Duodecar 12-Pin with Exhaust Tip (JEDEC E12-70)
Terminal Diagram	JEDEC 12GK
Type of Cathode	Coated Unipotential
Operating Position	Any

MAXIMUM RATINGS – Design-Maximum Values[c]

For operation as a Damper Tube in Color-TV Receivers utilizing a 525-line, 30-frame system

Peak Inverse Plate Voltage	$-e_{bm}$	5000[d]	V
Heater-Cathode Voltage:			
Peak	e_{hkm}	+300	V
		-5000	V
Average[e]	$E_{hk(av)}$	+100	V
		-900	V
Heater Voltage, ac or dc	E_h	5.7 to 6.9	V
Plate Current:			
Peak	i_{bm}	1500	mA
Average[e]	$I_{b(av)}$	350	mA
Plate Dissipation	P_b	11	W

Envelope Temperature (at hottest point on envelope surface)	T_E	220	°C

[a] Measured without external shield in accordance with the current issue of EIA Standard RS-191.

[b] Designed to mate with Duodecar 12-Contact Socket generally available from your local RCA Distributor.

[c] As defined in the current issue of EIA Standard RS-239.

[d] This rating is applicable when the duration of the voltage pulse does not exceed 15% of one horizontal scanning cycle. In a 525-line, 30-frame system, 15% of one horizontal scanning cycle is 10 μs.

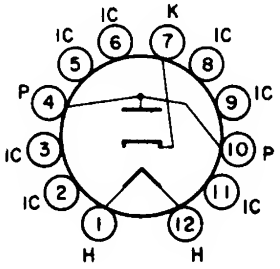
[e] Measured with a dc meter.

OPERATING CONSIDERATIONS

Socket terminals 2, 3, 5, 6, 8, 9 and 11 should not be used as tie points for external-circuit components. It is recommended that the socket tabs be removed to reduce the possibility of arc-over and to minimize leakage.

TERMINAL DIAGRAM (Bottom View)

Pin 1: Heater
Pin 2: Do Not Use
Pin 3: Do Not Use
Pin 4: Plate
Pin 5: Do Not Use
Pin 6: Do Not Use
Pin 7: Cathode
Pin 8: Do Not Use
Pin 9: Do Not Use
Pin 10: Plate
Pin 11: Do Not Use
Pin 12: Heater



JEDEC 12GK